Title (en)

Adaptive antenna receiving apparatus

Title (de)

Angepasstes Antennenempfangsgerät

Title (fr)

Appareil de réception par antennes adaptatif

Publication

EP 1231720 A3 20031210 (EN)

Application

EP 02002020 A 20020206

Priority

JP 2001032870 A 20010208

Abstract (en)

[origin: EP1231720A2] In an adaptive antenna receiving apparatus, a plurality of correlations between adjacent antennas are detected for each path, a fixed beam unique to each path arrival direction of the desired wave is formed on the basis of a vector generated by averaging the detected correlations, and each path is received and combined, or a plurality of correlations between adjacent antennas are detected for each signal sequence despread with a plurality of chip timings, a fixed beam unique to the arrival direction of each signal sequence is formed on the basis of a vector generated by averaging the detected correlations, and a path timing is detected on the basis of a delay profile generated from an output of each signal sequence, or a plurality of correlations between adjacent antennas are detected for each signal sequence despread with a plurality of chip timings, a fixed beam unique to the arrival direction of each signal sequence is formed on the basis of a vector generated by averaging the detected correlations, a path timing is detected on the basis of a delay profile generated from an output of each signal sequence, and each path is received and combined using the path timing and the fixed beam at the path timing. <IMAGE>

IPC 1-7

H04B 1/707; H04B 7/08

IPC 8 full level

H01Q 3/26 (2006.01); **H04B 1/707** (2011.01); **H04B 1/7115** (2011.01); **H04B 7/08** (2006.01)

CPC (source: EP KR US)

H01Q 3/26 (2013.01 - KR); **H04B 1/712** (2013.01 - EP US); **H04B 7/0854** (2013.01 - EP US); **H04B 7/086** (2013.01 - EP US); H04B 1/7113 (2013.01 - EP US)

Citation (search report)

- [YA] GB 2336741 A 19991027 - FUJITSU LTD [JP]
- [DYA] US 6064338 A 20000516 - KOBAYAKAWA SHUJI [JP], et al
- [PA] EP 1161001 A2 20011205 - NEC CORP [JP]
- [A] WO 0038276 A1 20000629 - CHOI SEUNG WON [KR]
- [A] EP 0949769 A1 19991013 - NEC CORP [JP]
- [A] YLITALO J ET AL: "PERFORMANCE EVALUATION OF DIFFERENT ANTENNA ARRAY APPROACH FOR 3G CDMA UPLINK", VTC 2000-SPRING. 2000 IEEE 51ST. VEHICULAR TECHNOLOGY CONFERENCE PROCEEDINGS. TOKYO, JAPAN, MAY 15-18, 2000, IEEE VEHICULAR TECHNOLGY CONFERENCE, NEW YORK, NY: IEEE, US, vol. 2 OF 3. CONF. 51, 15 May 2000 (2000-05-15), pages 883 - 887, XP000967997, ISBN: 0-7803-5719-1
- [A] TANAKA S ET AL: "PILOT SYMBOL-ASSISTED DECISION-DIRECTED COHERENT ADAPTIVE ARRAY DIVERSITY FOR DS-CDMA MOBILE RADIO REVERSE LINK", IEICE TRANSACTIONS ON FUNDAMENTALS OF ELECTRONICS, COMMUNICATIONS AND COMPUTER SCIENCES, INSTITUTE OF ELECTRONICS INFORMATION AND COMM. ENG. TOKYO, JP, vol. E80-A, no. 12, 1 December 1997 (1997-12-01), pages 2445 - 2453, XP000768670, ISSN: 0916-8508
- [A] NAGUIB A F ET AL: "RECURSIVE ADAPTATIVE BEAMFORMING FOR WIRELESS CDMA", COMMUNICATIONS - GATEWAY TO GLOBALIZATION. PROCEEDINGS OF THE CONFERENCE ON COMMUNICATIONS. SEATTLE, JUNE 18 - 22, 1995, PROCEEDINGS OF THE CONFERENCE ON COMMUNICATIONS (ICC), NEW YORK, IEEE, US, vol. 3, 18 June 1995 (1995-06-18), pages 1515 - 1519, XP000535014, ISBN: 0-7803-2487-0

Cited by

EP1583258A1; FR2888064A1; EP1161001A3; EP1365521A1; EP1564899A4; US7565172B2; WO2007003847A3; US6985106B2

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

EP 1231720 A2 20020814; **EP 1231720 A3 20031210**; CN 1369932 A 20020918; JP 2002237766 A 20020823; KR 20020066388 A 20020816; US 2002135514 A1 20020926; US 6670919 B2 20031230

DOCDB simple family (application)

EP 02002020 A 20020206; CN 02103582 A 20020207; JP 2001032870 A 20010208; KR 20020007158 A 20020207; US 6121702 A 20020204